

Panel Discussion (contd)

1 talking about the risk map for the groundwater?

2 MR. CLAY SMITH: Yeah.

3 MR. GREG deBRULER: That was
4 actually done by, it was Pacific Northwest
5 National Labs under contract to the Department
6 of Energy, actually ran the model that did that
7 calculation.

8 MR. CLAY SMITH: Okay. So
9 they are just putting information that they
10 suppose in a computer and supposedly come out
11 with a supposed map?

12 MR. GREG deBRULER: They have
13 seven models that they are using, and to do
14 that calculation, I think Tom Stoops could
15 really tell you how they got to these numbers,
16 because this is Tom Stoops, he's a hydrologist,
17 he does this kind of stuff, so maybe he wants
18 to say something.

19 MR. CLAY SMITH: I have a
20 question about that for Tom also.

21 How big is the aquifer underneath
22 that area, or is there one? Water travels, you
23 know, underneath the earth at various levels
24 and you have aquifers, and then you don't have
25 any, and some of the earth is porous. So it

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1 migrates around.

2 I suppose, did they choose that site
3 back 50 years ago, because there wasn't any
4 aquifers under there, or did they just choose
5 it because there wasn't anything on top of the
6 ground and they put it there because there
7 wasn't anybody around it?

8 MR. THOMAS STOOPS: The bottom
9 line is Col. Mathias chose the site because it
10 was desolate and it had a good source of clean,
11 cold water.

12 MR. DEE WILLIS: And power.

13 MR. THOMAS STOOPS: And power.
14 The entire Hanford Site is underlain by an
15 aquifer and it is in gravel, so it's a prolific
16 aquifer. Underneath a portion of the 200 Area
17 is a less prolific aquifer system, but it is
18 still underlain by an aquifer.

19 MR. CLAY SMITH: How deep is
20 it? How deep under the ground? I mean, what
21 kind of level have we got between the waste and
22 these two aquifers that are underneath there
23 that this stuff is eventually going to get to?

24 MR. THOMAS STOOPS: Depending
25 on the location of the waste site, there are

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Panel Discussion (contd)

1 soils up to about 250 feet thick.

2 MR. DEE WILLIS: Okay.

3 Questions or comment?

4 MS. KAREN HARDING: Karen
5 Harding, Mt. Hood.

6 DOE people, do you honestly believe
7 that this administration's plan to essentially
8 cut the budget and the time period will benefit
9 the citizens of this area, much less the
10 country or the world?

11 You are on the ground. Do you think
12 shaving off a billion dollars in however many
13 years is going to clean up Hanford?

14 MR. GEORGE SANDERS: I will
15 have to give you my perspective from my
16 keyhole, because I am obviously not in the
17 political part of the administration, and don't
18 think I'm going to sit up here and make a lot
19 of derogatory statements about the
20 administration. Okay? So I'm just not going
21 to go there.

22 However, what I will tell you is I
23 am fairly familiar with the efforts to
24 accelerate the work. Okay?

25 I have not participated in any

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Panel Discussion (contd)

1 discussions that said we are going to do a
2 lower quality work, we are going to kick a
3 bunch of stuff off the table, and we are not
4 going to do it.

5 The work that I have participated in
6 has been, how do we make this work more
7 efficient, how do we save money, how do we do
8 it more effectively, and so those are the kinds
9 of discussions I have participated in.

10 Now, have they set goals? You bet
11 they have. They have said, well, why don't you
12 tell us if you can do it for this much less.
13 And those kinds of goals have been set. And we
14 have been stressed and strained to try to meet
15 those. And we are still in the process of it.
16 Okay?

17 That's not a given, that that's all
18 done. But I will tell you that there is a lot
19 of intent of accelerating and moving that
20 cleanup this way and getting a lot of the
21 things done. And you will just have to be the
22 judge of how it turns out in the long term.

23 MR. DEE WILLIS: Panel?

24 MR. GREG deBRULER: Karen, the
25 concern I have is this: Back in the mid '90s

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Panel Discussion (contd)

1 they did a thing called BEMR, Baseline
2 Management Environmental Report, and they
3 looked at basically the whole complex, came up
4 with some numbers. One time it was like --
5 BEMR, like a BMW, BEMR. Anyway, it came up
6 with 350 billion dollars was a high number, 250
7 billion dollars was kind of a low number.

8 And in those days of course they had
9 never characterized all the sites, they still
10 haven't. They didn't know -- they got an
11 estimate. It was we will call it a best case
12 guesstimate. About maybe what it would cost.

13 But in those assumptions, there was
14 the assumption that they wouldn't ever clean up
15 the groundwater. Not just at Hanford, at a lot
16 of the sites throughout the whole country, they
17 would leave it contaminated, and there were a
18 lot of other issues.

19 So, if you looked at the numbers
20 when they were reported back in those days, we
21 had discussions, this was during the O'Leary
22 administration. In fact I had a great
23 conversation with Tom Grumbly, who was The
24 undersecretary of Energy, and I said, "What do
25 you think those numbers are worth?"

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Panel Discussion (contd)

1 He said, "I think those numbers are
2 fairly accurate, considering the limited
3 cleanup this institution wants to do."

4 So, keeping that as a historical
5 note.

6 Now, then you have this new
7 administration that comes in, says they're
8 going to whack a hundred billion dollars off of
9 it. They did this before they had the
10 technical basis to satisfy, quote, the nation
11 that they could technically achieve that.

12 I am all for accelerating cleanup,
13 and I think that Nick is perfectly right on it,
14 yes, they do things kind of slow out here.
15 Yes, the slower they go, the more money they
16 make. That used to be the whole system.

17 Now they have accelerated cleanup.
18 But is it valid, and are they going to cut
19 corners?

20 You bet. For example, transuranic
21 waste, or waste which was generated before 1970
22 which is a mixed bag of stuff, they might have
23 70,000 drums out there.

24 The Department of Energy, if they
25 had their way, they don't want to take the

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Panel Discussion (contd)

1 stuff out of the ground. They just want to
2 leave it there. So there will be these random
3 waste sites all over the country.

4 Transuranic waste prior to about
5 1999, the Department of Energy didn't really
6 even want to talk about that stuff too much,
7 because we have a waste site out there called
8 618/1011, that when they originally estimated
9 the cost to clean it up, it is really hot
10 stuff, really hot remote handled stuff, the
11 first of them they estimated was about 700
12 million dollars. That was like over
13 three-quarters of the Hanford budget. Then it
14 dropped down to about 350 million dollars.

15 Okay. Well, when they did that
16 assessment and they were grappling with the
17 idea of getting rid of this transuranic waste
18 out of there, I got some great information from
19 Headquarters that said, you ain't going to
20 touch that stuff. That's what Headquarters was
21 telling Richland. You ain't going to touch
22 that stuff. Because if you have to deal with
23 that waste out in this dry arid climate, you
24 are going to have to deal with the waste at
25 Savannah River that has got a worse problem

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Panel Discussion (contd)

1 because their groundwater is five feet below
2 the surface, and Oak Ridge and the other sites.
3 So --

4 MR. MICHAEL COLLINS: Could I
5 follow up, just one little fact. The EIS
6 assumes that 618/1011 transuranic waste is dug
7 up.

8 MR. NICHOLAS CETO: In fact
9 there is a ROD that was signed by -

10 MR. DEE WILLIS: ROD?

11 MR. NICHOLAS CETO: A Record
12 of Decision, that was signed by DOE and EPA,
13 and as part of the Tri-Party Agreement, that
14 says that waste site will be dug up and taken
15 to the waste facility in New Mexico. So, --

16 MR. GREG deBRULER: I never
17 said they weren't going to do it. I said their
18 intent wasn't to do it.

19 MR. GEORGE SANDERS: And I
20 wasn't in on that conversation with Grumbly and
21 Greg, so I can't attest to any of that.

22 But I will tell you what the
23 official position of the Department is with
24 respect to all the burial grounds.

25 We have committed to retrieve all of

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Panel Discussion (contd)

1 what is called the post '70 burial grounds.
2 That's approximately, what, 77,000 drums or
3 drum equivalents of waste, which has got some
4 transuranics in it, it is going to have some
5 low-levels in it, a mixed bag. We will pull
6 that out.

7 The balance of those burial grounds
8 are going to be subject to the CERCLA process,
9 which EPA oversees on the site. All those
10 burial grounds are going to get looked at.

11 And we will do some risk
12 assessments, we will take a look at what those
13 risks are, and individual Records of Decisions
14 will be made on the basis of the investigations
15 and the work that's done on the CERCLA process.

16 And Nick and EPA are the folks,
17 along with the state, who will oversee that
18 part of the process.

19 We have not made decisions on how we
20 are going to deal with those pre-'70 burial
21 grounds yet, but the CERCLA process will be the
22 regulatory process with which we deal with it.

23 MR. MICHAEL COLLINS: And
24 those investigations are part of the Tri-Party
25 Agreement.

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Panel Discussion (contd)

1 MR. DEE WILLIS: One more
2 follow-up question.

3 MS. JUDY MERRILL: So is the
4 groundwater not part of the Tri-Party
5 Agreement?

6 MR. NICHOLAS CETO: Yes.

7 MS. JUDY MERRILL: It is? It
8 is not going to stay there. I don't understand
9 how that could not be part of the cleanup, the
10 groundwater.

11 MR. NICHOLAS CETO: No. It
12 is. I guess I am confused a little bit. Why
13 don't you think it is part of the cleanup?

14 MS. JUDY MERRILL: The
15 groundwater that's in the vadose zone, or that
16 is the same thing, never mind, the water that
17 is contaminated, that huge amount of land
18 that's contaminated, is part of the Tri-Party
19 Agreement?

20 MR. NICHOLAS CETO: It is part
21 of the SuperFund site cleanup, it is part of
22 the Tri-Party Agreement, and no final decisions
23 have been made on what's going to happen with
24 it.

25 MS. JUDY MERRILL: Okay.

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Panel Discussion (contd)

1 MR. NICHOLAS CETO: Right now
2 we are trying to see how well we can do with
3 source control, we are trying to see what
4 technologies are out there to deal with it.

5 There's a goal, and I talked about
6 this I think the last time I was in Hood River,
7 there's a goal to try to restore those aquifers
8 to the extent they can be restored.

9 And that is the, and it's not the
10 million dollar question, it's a lot more than
11 that, it's the question that people are going
12 to have to decide, how much they want to spend
13 and what is worth doing, and that's going to be
14 the biggest, toughest decision that Hanford has
15 to make in the next decade, is how far do we go
16 with groundwater restoration.

17 MR. DEE WILLIS: Panel?

18 MR. GEORGE SANDERS: I just
19 need to make a couple comments.

20 One of the things that we are doing
21 as far as accelerated process is we have an
22 initiative that was in our Hanford management
23 plan which was initiative 6, and that was
24 dealing with high risk waste sites in the
25 groundwater.

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Panel Discussion (contd)

1 And so what we're trying to do is
2 effectively go after some of the higher risk
3 areas. We have got some discharges that are
4 still open to rain water and recharge, we are
5 going to try to eliminate as many of those as
6 we can, we are going to go after sources, we
7 are going to do things like we've got leaky
8 waterlines on the site, the water leaks out
9 into the waste, can move it into the vadose
10 zone.

11 We are going after the leaky
12 waterlines. We are going to try to clean those
13 up.

14 So there is a whole series of what I
15 call near term activities that we are going to
16 embark upon to try to deal with the most urgent
17 pieces of that.

18 Now, there's a long-term groundwater
19 solution. That's the ones that Nick was
20 referring to. We don't have answers to all of
21 that yet. And that's going to be ongoing.

22 MR. DEE WILLIS: Greg, and
23 then Tom.

24 MR. GREG deBRULER: Here is a
25 reality check.

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Panel Discussion (contd)

1 The Tri-Party Agreement was signed
2 in 1989, and everybody knew that the
3 groundwater was contaminated in 1989. They
4 also knew that the state law and federal law,
5 everything says you have to clean up to the
6 highest beneficial use, which is drinking
7 water. This is their idea.

8 150 years out, 300 years out, 150
9 years out right now, basically you aren't going
10 to be able to use the groundwater.

11 There are planning assumptions that
12 for 300 years you won't be able to use the
13 groundwater under Hanford. There are planning
14 assumptions that say that you can't use the
15 groundwater in N-Area which is right on the
16 Columbia River when they release it at as being
17 clean in 2012.

18 Nick brought the point up at the
19 groundwater workshop which the Department of
20 Energy referred to come to, but Nick and the
21 state of Washington came to, the groundwater
22 workshop was hosted by Columbia River Keeper in
23 Portland and here, and they refused to come.
24 That's why that coffin is laying up there.

25 And it was very clear that there is

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Panel Discussion (contd)

1 no intent right now or planning or funding or
2 any projected funding about what they are going
3 to do.

4 In 1989 they knew the problem. Do
5 you think they spent money and time and energy
6 to develop the technologies to get rid of this
7 problem? No. They have piece meal it
8 around.

9 And of the real sad part of the
10 problem is the guy who's running EM-50 right
11 now is a guy named Jim Owen --

12 MR. DEE WILLIS: EM-50?

13 MR. GREG deBRULER: EM-50 is
14 their research and management side of it?

15 MR. MICHAEL COLLINS: Technology
16 and development side.

17 MR. GREG deBRULER: Technology
18 and development side of it.

19 He's the gentleman that wrote a
20 letter to the state/tribal working group and
21 said, there's going to be one shot at cleanup
22 at Hanford, you are going to do it the way,
23 expediting it now, and after that if you want
24 it any cleaner, you are going to pay for it
25 yourself. He is running the science and

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Panel Discussion (contd)

1 technology.

2 Do we have a problem? Yeah. Nick
3 brought it out real clearly. He said if the
4 people of the Northwest demand that cleanup of
5 groundwater is a priority and has to happen, we
6 are the only ones that are going to make it
7 happen, because the institutions don't have the
8 capability to fight that battle.

9 And my question is, to everybody
10 that's here still, what is an acre-foot of
11 water worth today, in an arid climate, in a
12 hundred years, and 150 years, and 300 years,
13 and you look at that resource value, and then
14 go back to them and say, excuse me, you know,
15 it's unconscionable.

16 They spent 5.5 trillion dollars
17 making this bloody mess by making weapons, and
18 now they want to spend 100 billion to 200
19 billion to clean it up.

20 Excuse me. The priorities are
21 wrong. So that's my biggest problem. Thank
22 you.

23 MR. DEE WILLIS: Tom Stoops.

24 MR. THOMAS STOOPS: I did want
25 to indicate that when EPA did their five year

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Panel Discussion (contd)

1 review of the cleanups at the Hanford Site in
2 2001, they noted that Hanford was, for lack of
3 a better term, delinquent in their focus on
4 groundwater, and were able to convey that to
5 DOE.

6 DOE has responded to that. When
7 they put out their acceleration strategy, there
8 was not a strategy number 6 for groundwater
9 focus.

10 When it got reviewed, they heard
11 that comment, they heard it very loudly from
12 the agencies and the stakeholders, and they put
13 that strategy portion in in rather quick order.

14 The next issue though is keeping the
15 pressure on to keep the funding flowing to get
16 the work done.

17 MR. DEE WILLIS: Next
18 question.

19 Okay. If there are no more
20 questions, anymore comments? Panel?

21 MR. GREG deBRULER: I have a
22 thank you comment.

23 MR. DEE WILLIS: Hold that
24 thank you.

25 MS. JUDY NELSON: I know it's

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Panel Discussion (contd)

1 late.

2 MR. DEE WILLIS: Ms. Nelson.
3 Speak into the mike.

4 MS. JUDY NELSON: This goes
5 back aways. Judy Nelson.

6 It's my understanding those single
7 wall tanks are sludge, 25 percent sludge, and
8 there is no intention of doing anything about
9 that.

10 Can anybody explain that, please?

11 MR. GEORGE SANDERS: I'm afraid
12 tonight that you haven't got the right set of
13 people here to give you those answers. So, we
14 just don't have the right folks here from the
15 Office of River Protection.

16 MS. JUDY NELSON: It is
17 unconscionable in my mind that we have been
18 talking about these tanks, I will tell you all
19 what I have been saying for year, I used to
20 hire a babysitter to come, they are now 28 and
21 30, they don't need a babysitter anymore, and
22 nothing has changed, tanks leak, some of those
23 same wall tanks have imploded or exploded as
24 much as 12 feet from being super heated, and
25 you are not going to do anything?

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Panel Discussion (contd)

1 What's down at the bottom of that
2 tank that would make a metal wall heat up and
3 collapse to the tune of 12 feet, and then leak,
4 and you are going to leave 12 percent -- or 25
5 percent of it as sludge and just ignore it?

6 MR. GEORGE SANDERS: I can give
7 you one response on that, because I did work in
8 the Tank Farm project for about four or five
9 years. And some of this is done with an
10 agreement from the state of Washington, consent
11 decree and some other things. But over a
12 period of time we have pumped the liquids out
13 of the single-shell tanks.

14 So, of course we did have leaks that
15 went out, but we also spent a lot of money
16 getting the liquids out of the tanks.

17 Now, there is still sludges in it.
18 But those sludges aren't going to come out of
19 the cracks and things as the tanks begin to
20 fail, the single shell tanks. The sludges will
21 tend to stay in here.

22 So that's an interim. In fact the
23 title of the thing was the interim
24 stabilization. It wasn't a permanent solution.
25 But it was an effort to get the liquids out of

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Panel Discussion (contd)

1 those tanks so they could not keep the pressure
2 on and leak.

3 MR. DEE WILLIS: Let's move
4 on.

5 MS. JUDY NELSON: (Inaudible).

6 MR. GEORGE SANDERS: Well,
7 that's ongoing. Again, the details of that,
8 you don't have the right folks here to explain
9 that.

10 MR. DEE WILLIS: Okay. Greg
11 deBruler.

12 MR. GREG deBRULER: I don't
13 represent the Office of River Protection,
14 because they refuse to come to meetings, but on
15 that little fun pun, I had to throw that in
16 there, Judy, 149 tanks of the single-shell
17 tanks, okay, they are down to where they are in
18 the sludge zone.

19 The Tri-Party Agreement requires
20 that they clean up all but 350, what's the
21 word, liters or something, a little bit, like
22 less than 1 percent, 1 percent, that's what
23 they require.

24 But the new Office of River
25 Protection manager who refused to come to the

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Panel Discussion (contd)

1 last meeting, which is Roy Schepens, he has a
2 dream, and he wants to clean up 40 percent of
3 these tanks -- pardon me, stabilize 40 percent
4 of these tanks and call them closed, or, what's
5 the word, official word? Closed, 40 tanks in
6 the next few years.

7 His idea is, as far as we're
8 concerned, not legal, but's pushing forward
9 with that.

10 You see, if you had a gas station in
11 the state of Washington, you'd have to dig up
12 the tank, you'd have to dig up the soil.

13 Well, if you think about Hanford and
14 how hot the tanks are, that's kind of a risky
15 business, you know. So, maybe there is a
16 better way, but it isn't leaving the sludge
17 there. And he wants to demonstrate this in the
18 next few years to do 40 tanks.

19 So, it's going to be a real battle.

20 And then we also heard today that,
21 or was it yesterday, or a few days ago, we hear
22 there's coming out of the Department of Energy,
23 the river protection side, that there's going
24 to be a three-year delay to now the start of
25 day for vitrification.

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Panel Discussion (contd)

1 That one I hear is coming soon to a
2 neighborhood by us, and if that happens, we
3 could have problems.

4 MR. DEE WILLIS: I just want to
5 point out the tanks are not the subject of this
6 public meeting. It is okay to talk about them.
7 But they are not the subject of this meeting.

8	Any final comments?
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9 MR. GREG deBRULER: Just thank
10 you for coming, for those that are still here.

11 MR. DEE WILLIS: This meeting
12 is closed.

13 MR. GREG deBRULER: And we
14 appreciate your support. Thanks.

16 (10:00 p.m.)

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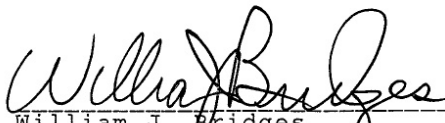
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